

AMENDMENTS TO THE CLAIMS:

This listing of the claims will replace all prior versions, and listings, of the claims in this application.

Listing of Claims:

1.-2. (Cancelled)

3. (Currently Amended) The method of claim 7, further comprising receiving, from a mobile station, a communication including, in at least part, of an identifier associated with a first network element used to allocate a temporary identity the identifier to the mobile station; and

uniquely identifying the first network element based on the identifier associated with the first network element and an identifier of a paging area where the temporary identity was allocated.

4.-6. (Cancelled)

7. (Currently Amended) A method comprising:

allocating, using a network element ~~having an associated identifier~~, a temporary identity for a mobile station in a cellular network; and

sending a message to the mobile station, wherein the message comprises ~~signaling~~ the allocated temporary identity ~~to the mobile station~~ for use by the mobile station during at least an uplink data transfer procedure, ~~and~~ wherein the temporary identity comprises ~~at least, [[a]] in part, of the an~~ identifier associated with that uniquely identifies the network element used ~~to allocate~~ that allocated the temporary identity.

8.-19. (Cancelled)

20. (Currently Amended) A cellular network comprising:

~~at least one~~ a network element configured to allocate a temporary identity to a mobile station for use by the mobile station during at least an uplink data transfer procedure, wherein the temporary identity comprises, ~~at least a in part, of an identifier associated with that~~ uniquely identifies the network element ~~used to allocate~~ that allocated the temporary identity; and

a database element configured to:

receive an inquiry including the ~~at least part of the identifier associated with that~~ uniquely identifies the network element ~~used to allocate~~ that allocated the temporary identity; and

determine, based on the inquiry, an address of the network element ~~which~~ that allocated the temporary identity.

21. (Previously Presented) The cellular network of claim 20, wherein the database element is a domain name server.

22. (Previously Presented) The cellular network of claim 20, wherein the database element is further configured to send an inquiry to another network element currently storing a context for the mobile station.

23.-24. (Cancelled)

25. (Currently Amended) A mobile station comprising,

a receiver configured to receive a message, wherein the message comprises ~~signaling allocating~~ a temporary identity allocated to the mobile station, wherein the temporary identity comprises, ~~at least a in part, of an identifier of~~ that uniquely identifies a network element that allocated the temporary identity, and
the mobile station is configured to use the temporary identity ~~allocated to the mobile station~~ during at least an uplink data transfer procedure.

26. (Currently Amended) The mobile station of claim 25, wherein using the temporary identity during ~~an~~ the uplink data transfer procedure comprises including ~~the at least part of the identifier associated with the network element used to allocate the temporary identity~~ in an uplink communication to ~~[[a]]~~ another network element associated with a different paging area.

27. (Previously Presented) The network element of claim 28, wherein the network element is a support node.

28. (Currently Amended) A network element comprising:

a controller configured to allocate a temporary identity for a mobile station in a cellular network, ~~wherein the network element has an associated identifier; and~~

~~the network element~~ controller is further configured to send a message to the mobile station, wherein the message comprises ~~signaling allocating~~ the allocated temporary identity ~~to the mobile station for use by the mobile station during at least an uplink data transfer procedure, and wherein the temporary identity comprises, at least a in part, of the an identifier associated with~~ that uniquely identifies the network element ~~used to allocate~~ that allocated the temporary identity.

29. (Previously Presented) The radio station controller of claim 31, wherein the radio station controller is a base station controller.

30. (Previously Presented) The radio station controller of claim 31, wherein the radio station controller is a radio network controller.

31. (Currently Amended) A radio station controller comprising:

a controller configured to route data packets to a mobile station in a cellular network, the data packets including a temporary identity allocated to ~~[[a]]~~ the mobile station in ~~[[a]]~~ the cellular network, wherein the temporary identity was allocated for use by the mobile station during at least an uplink data transfer procedure, wherein the temporary identity comprises, at least a in part, of an identifier ~~associated with~~ that uniquely identifies a network element ~~used to allocate~~ that allocated the temporary identity; and

~~the radio station controller~~ controller is further configured to use the ~~at least part of~~ the temporary identifier to route data packets to the network element when the network element is serving the mobile station.

32. (Previously Presented) The method of claim 7, where the temporary identity comprises an indication of a paging identity that is unique to the mobile station.

33. (Currently Amended) The method of claim 7, wherein using the temporary identity during ~~an~~ the uplink data transfer procedure comprises including the ~~at least part of the~~ identifier ~~associated with the network element used to allocate the temporary identity~~ in an uplink communication from the mobile station.

34. (Currently Amended) The method of claim 7, wherein the network element is in a first paging area of a plurality of paging areas, the method further comprising
in response to a communication from the mobile station receiving a communication from a different mobile station indicating that the different mobile station is ~~moving from a~~ entering

~~the first paging area to a second paging area of a plurality of paging areas and, wherein the communication comprises at least part of a temporary identity previously allocated to the different mobile station, including at least a part of wherein the temporary identity includes, in part, an identifier associated with a that uniquely identifies a different network element used to allocate that allocated the temporary identity[[]]; and the network element using the temporary identity and the identifier of the second paging area for deriving an identifier of a to identify the different network element of the first paging area which served the mobile station before the move.~~

35. (Currently Amended) A method comprising:

sending, by a mobile station in a cellular network, a communication to a network element in the cellular network; and

receiving at the mobile station, in response to the communication, a message comprising ~~signaling allocating~~ a temporary identity allocated to the mobile station for use by the mobile station during at least an uplink data transfer procedure, wherein the temporary identity comprises, ~~at least a~~ in part, of an identifier ~~associated with~~ that uniquely identifies a network element ~~used to allocate~~ that allocated the temporary identity.

36. (Previously Presented) The method of claim 35, where the temporary identity comprises an indication of a paging identity that is unique to the mobile station.

37. (Currently Amended) The method of claim 35, wherein using the temporary identity during ~~an~~ the uplink data transfer procedure comprises including the ~~at least part of the identifier associated with the network element used to allocate the temporary identity in an uplink communication to [[a]] another network element associated with a different paging area.~~

S.N.: 09/806,939
Art Unit: 2617

38. (Currently Amended) The method of claim 35, wherein the communication to the network element comprises ~~at least part of~~ a temporary identity previously allocated to the mobile station.